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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,302	09/09/2004	William Arthur Warner II	132673	5301

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EXAMINER	
VIGUSHIN, JOHN B	

ART UNIT	PAPER NUMBER
2841	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/711,302	WARNER ET AL.	
	Examiner	Art Unit	
	John B. Vigushin	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,11-13,15 and 16* is/are rejected.

7)☒ Claim(s) *6-10,14,17 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 September 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20040909*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Rejections Based On Prior Art

1. The following references were relied upon for the rejections hereinbelow:

German et al. (US 6,983,385 B2) Jinnouchi (US 6,697,883 B1)

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> **A person shall be entitled to a patent unless –**
>
> **(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.**

3. Claims 1-3, 5, 11-13 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by German et al.

As to Claim 1, German et al. discloses, in Fig. 2, a first circuit board 202 connectable to a second circuit board (a mezzanine card inserted into a connector 208; col.6: 9-18), the first circuit board comprising: at least one set of contacts (the set of contacts 211, 213 and 215, 217; hereinafter expressed as the contact set "211/213" and the contact set "215/217"), each set 211/213 and 215/217 configured to receive and electrically conductive keypin 250 for bridging a set of the contacts (keying mechanism 219 of keypin 250 bridges the contact set 211/213 in the first key opening 205 and bridges the contact set 215/217 in the second key opening 207; col.7: 3-6 and 61-64); a

detection circuit 229 in signal communication with the at least one set of contacts 211/213, the detection circuit 229 productive of a logic signal (231, 233) in response to a set of the contacts (211/213, 215/217) being bridged (col.7: 10-20; col.8: 1-12); and a voltage generator 218 responsive to the logic signal and productive of a voltage signal at a connector 208 connectable to the second circuit board (col.7: 3-20; col.7: 61-col.8: 12; and col.8: 31-46); wherein the voltage signal at the connector has a first voltage value in response to the keypin 250 being disposed at a first pin location (corresponding to contact set 211/213), and a second different voltage value in response to the keypin 250 being disposed at a second pin location (corresponding to contact set 215/217), wherein at least one of the pin locations results in a set of the contacts 211/213 or 215/217 being bridged (col.7: 3-20; col.7: 61-col.8: 12).

As to Claim 2, German et al. further discloses that in response to the keypin 250 being disposed at the first pin location, a first input signal 225 is provided to the detection circuit 229; and in response to the keypin 250 being disposed at the second pin location, a second different input signal 227 is provided to the detection circuit 229 (col.7: 10-20; col.8: 1-12).

As to Claim 3, German et al. further discloses the voltage generator 218, 220 comprises a switch 235, 237 (col.8: 50-60).

As to Claim 5, German et al. further discloses the voltage signal has the first voltage value in response to the keypin 250 being disposed at only the first pin location (corresponding to contact set 211/213); and the voltage signal has the second voltage

value in response to the keypin 250 being disposed at only the second pin location (corresponding to contact set 215/217) (col.7: 3-20; col.8: 61-col.8: 12).

As to Claim 11, German et al. further discloses the connector 208 comprises a single conductor receptive of the voltage signal at the first and the second voltage values (col.8: 18-25).

As to Claim 12, German et al. discloses, in Fig. 2, a method of providing a voltage signal from a first circuit board 202 directed to a second circuit board (a mezzanine card inserted into a connector 208; col.6: 9-18) in response to the attachment of a keypin 250 to the first circuit board 202, the method comprising: generating a first input signal 225 in response to the keypin 250 being attached to the first circuit board 202 at a first location (corresponding to the contact set 211/213; col.7: 10-20), and generating a second different input signal 227 in response to the keypin 250 being attached to the first circuit board 202 at a second location (corresponding to the contact set 215/217; col.8: 1-12); generating a first logic signal 231 in response to the first input signal 225 (col.8: 31-38), and generating a second different logic signal 233 in response to the second input signal 227 (col.8: 39-46); and generating at a common output point a first voltage signal in response to the first logic signal 231 (col.8: 31-38) and a second different voltage signal in response to the second logic signal 233 (col.8: 39-46), wherein the Applicant's limitation requiring generating the first and second voltage signals at a common output point--i.e., at one of the connectors 208--is disclosed as an alternate embodiment in col.8: 18-25.

As to Claim 13, German et al. further discloses receiving a keypin 250 at the first circuit board 202 at a first location (corresponding to contact set 211/213), a second location (corresponding to contact set 215/217), or any combination comprising at least one of the foregoing locations (col.7: 3-20, col.7: 61-col.8: 12).

As to Claim 16, German et al. further discloses the voltage signal has the first voltage value in response to the keypin 250 being disposed at only the first location (corresponding to contact set 211/213); and the voltage signal has the second voltage value in response to the keypin 250 being disposed at only the second location (corresponding to contact set 215/217) (col.7: 3-20; col.8: 61-col.8: 12).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over German et al. in view of Jinnouchi.

As to Claims 4 and 15:

I. German et al. discloses a computer system comprising a first circuit board 202 to which second (mezzanine) boards are connected at connectors 208, the computer system further including voltage generators 218, 220 responsive to the respective logic signals 231, 233 from a detection circuit 229 that detects the bridging of contacts 211/213 or 215/217 with keypin 219, wherein the first voltage generator 218 provides a first voltage at a connector 208 for a second board corresponding to the contact set 211/213 bridged by keypin 219, in a embodiment, and the second voltage generator 220 provides a second voltage at a connector 208 for a second board corresponding to the contact set 215/217 bridged by keypin 219, but does is silent as to the values of the two different operational power voltages provided to the second boards at connector(s) 208.

II. Jinnouchi discloses a computer system 1 to which various application circuit boards 2 are connected through connector 11, and each of the circuit boards 2, when its connector 21 is connected to computer system connector 11, provides data signals to the computer system 1 that identify the type of board and operational power required, wherein the power requirements for the application board 2 are either the industry

standard 3.3 V or 5.0 V, one of which is supplied by the computer system 1 to the application board, as required (col.1: 10-19; col.3: 34-col.4: 6).

III. Since both German et al. and Jinnouchi both teach computer systems to which second circuit boards--having different power supply requirements for the application components mounted thereon--are to be connected, then it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the voltage generators of German et al. to output a voltage signal to the connector contacts, to which the second boards are connected, that is either the 3.3 V or 5.0 V power supply standard required for the application components mounted on the second circuit board of German et al., as taught by Jinnouchi.

Allowable Subject Matter

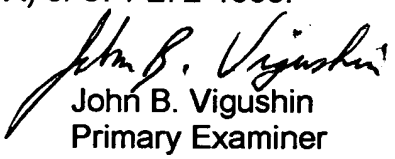
7. Claims 6-10, 14, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Vigushin whose telephone number is 571-272-1936. The examiner can normally be reached on 8:30AM-5:00PM Mo-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John B. Vigushin
Primary Examiner
Art Unit 2841

jbv
November 07, 2006